

A YEARS' COLLECTING IN THE STATE OF
TAMAULIPAS, MEXICO.

BY JOHN C. PHILLIPS.

ON THE first of August, 1908, the well-known collector, Mr. Frank B. Armstrong, began work in the State of Tamaulipas, Mexico, collecting the series of birds which is listed below. The work was continued for one year.

The localities visited ranged from Matamoros, at the northeast extremity of the State, to Altamira in the extreme south. Most of the time, however, was spent in the hill region west and north of Ciudad Victoria in the valleys of the Sierra Madre mountains, which here form the western boundary of the State of Tamaulipas, and along the river valleys east of the mountains. It may be well to mention here the general character of the stations represented by the collection, beginning with Matamoros.

The country about Matamoros is the level valley bottom of the Rio Grande, where the general vegetation is chaparral, bunch cactus and mesquite, at a level of only eighty feet above the sea. San Fernando, some seventy miles south on the River Presos, is also near the coast, and is surrounded by a country very much like that of the Rio Grande Valley, and of low elevation. These regions were visited in August, October, December and February.

The intermediate region embraces the several localities lying north and west of Ciudad Victoria. It can be roughly divided into a mountain region: Santa Leonor, and the hill settlements of Realito, Carricitos, Montelunga, Galindo, Rampahuila, Portrero, Guiaves; and a plain region, embracing the following river localities: Santa Engracia, Caballeros, Ciudad Victoria, Martinez and La Cruz. Both of these regions were visited in autumn, September and October; and again in March, April, May, June and July. The following description of the two regions is taken from Mr. Armstrong's letters:

"Santa Leonor is at the base of the mountains, at the mouth of a great cañon. Here the trail starts up the first hill in a winding course until it reaches the summit, and thence downward a little;

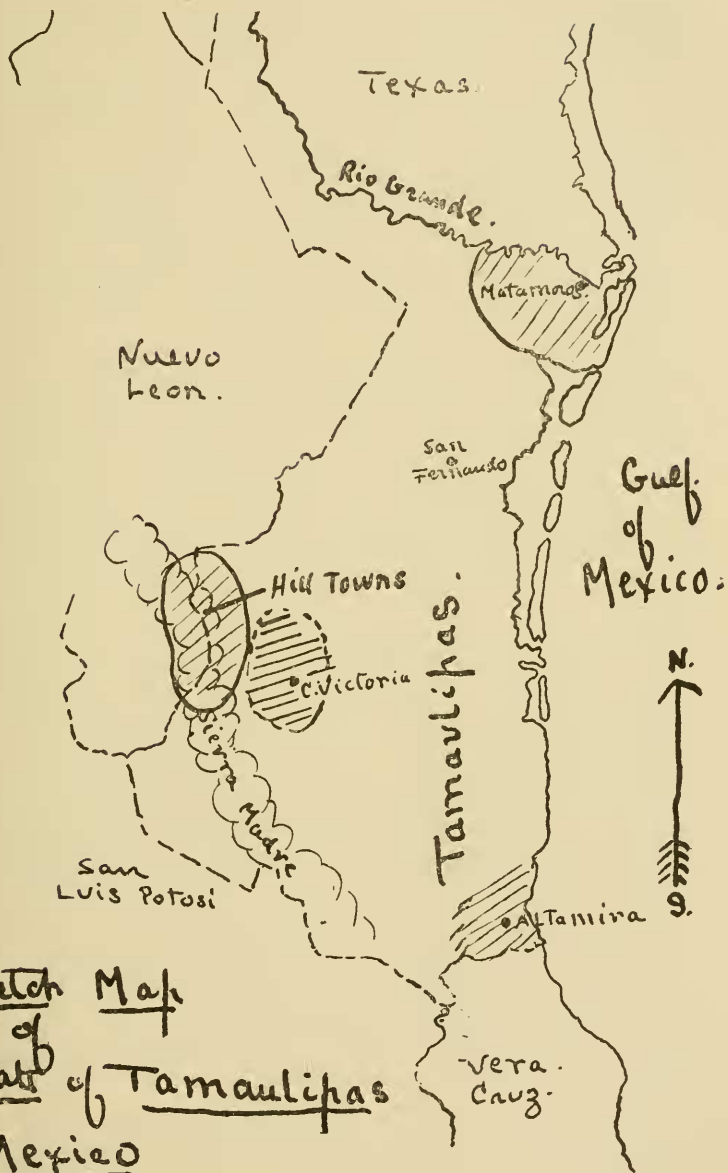
and then ascends the second ridge of hills, and so on over about four great hills until Realito is reached, at an elevation of about 8000 feet. This same trail forks out in different directions to various mines and settlements throughout the mountains. At Santa Leonor the scrub brush disappears, and around and in the cañon there are heavy ebony forests mixed with elm (probably not a true elm) and buttonwood trees which attain a great height, with a heavy underbrush and many vines, so thick that one can scarcely see six feet through it. Here is the home of Brasher's Warbler, Berlandier's Wren, Blue-crested Mot-mot, and Coppery-tailed Trogon. The only chance to catch a glimpse of these birds is when they cross a trail or wood road, as the thicket is so dense and tangled that one can hardly push a way through it.

"This is the condition of the cañon until it reaches considerable elevations, or traverses several miles. Above Santa Leonor, on the trail that ascends the first hill, in going up, one passes through a thicket of green bushes with heavy foliage, and from this to more open places, with scrubby, spreading bushes and big rocks, and further up the oak begins with tall grass and boulders everywhere. This continues on the ascent for some way, when the great pines¹ begin; and then at an elevation of say 3000 feet, up to 10,000 feet, the mountains are about the same: immense pines over the slopes, intermixed with oaks, and tall grass and boulders everywhere.

"Most of the birds labelled Santa Leonor were taken in the cañon and in front of the cañon where the plains begin, very few being taken on the hill slopes back of or above the town.

"Carracitos (6000 feet) is the name given a valley between two ridges, where a dam was constructed making a small lake. This place being flat, or nearly so, is covered with a big pine grove with oaks and boulders on the slopes on either side of it. Here are Wild Turkey, Deer and Massina Partridge; and on the slopes, Couch's Jay, Ant-eating Woodpeckers, Boucard's Sparrow, Jouy's Warbler, and Hepatic Tanager. This place is used by freighters to pasture and rest up their pack mules, and has been a camping place for many years. The first Smith's Nightingale Thrush was taken on

¹ Probably *Pinus ceruonoides* and *P. nelsoni* on the lower slopes, and *P. ponderosa* and a form of *P. montezumæ* on the higher slopes, according to a letter from Mr. G. R. Shaw.



Sketch Map
of
State of Tamaulipas
Mexico

the slopes above this point, the only bird of the species seen here. Afterwards, in an entirely different locality, many were taken. They will be mentioned further on in the description of Galindo.

"The next place is Montelunga, situated on a little plateau, "mesa," or table-land, at an elevation about 5000 feet. Here the trees are all tall pines, except in a cañon which skirts the place, where tall trees like elms are found, and some underbrush.

"Azure Bluebirds were taken on the table-lands; also Boucard's Sparrow; several species of warblers in migration; Couch's Jay; woodpeckers, etc.; and in the cañon, solitaire or "silgara" wrens, and trogons.

"The next station Galindo is peculiarly well adapted for bird collecting. It is really a wide cañon with great slopes on each side, towering to a height of several thousand feet, and shutting in a valley of some miles of dense, damp virgin forest. The mountain sides shut out the winds, and make Galindo as silent as night. At one end of the valley is a small settlement of miners — only a few houses. At the other end is the forest the trees in which attain to so great a height that a charge of shot will not reach the upper branches.

"Among the birds taken here were hummingbirds of different kinds, attracted by the great variety of flowers and air plants. The shady depths of this place are the home of two species of whippoorwill, and in about the same spots we found a number of Smith's Nightingale Thrush, and the Fulvous Nightingale Thrush. They, like many other birds, were placed by their note, which was heard plainly through the stillness of the forest. Throughout this same damp forest were found various warblers, vireos, tanagers, trogons, thrushes, etc., and on the slopes, jays, woodpeckers, and other forms that inhabit the mountains everywhere.

"Realito, at a still higher elevation, is also a mining settlement of two or three huts near a spring close to the summit of a big mountain, the country is level or rolling, and covered with pines and oaks. Here the birds differed a little from those of Galindo.

"Similar in character are Rampahuila and Portrero, mining camps nearby.

"Guiaves cañon is like Galindo, but is narrower and its slopes

are perpendicular, with more bare cliffs. The cañon is also much deeper, but the vegetation is the same as at Galindo. The plains in front of Santa Leonor are all much alike, as are the mountains for the most part.

"The stony plains regions are covered with a plant called anacquito; and the ground is almost bare of grass. The country is slightly rolling and uniform, except for the river bottoms. These plains are threaded by a number of little streams, at intervals of some ten or fifteen miles. Along these water courses is a growth of tall elm and other big trees; also cypress, and an underbrush of green saplings, vines, and weeds. The streams are Cruz, Santa Engracia, Caballero, Martinez, and Victoria; and a description of one suits the others. The map shows their location; and their vegetation and general character are the same. They are strong, and very shallow; some places only two inches deep, and from sixty to two hundred feet wide."

"Altamira¹ in the lowlands has a sandy soil, tropical vegetation, except for oak timber, and numerous tule swamps. There are very few wagon roads, all traffic being done on horseback over trails. The forest in places is a regular jungle, with vines and rank foliage and several species of stunted, thorny bushes, or trees, in the higher places; and a weed-like pineapple plant (called "huipia") covers the ground and makes the woods practically impassable, on account of the cat-claw thorns along its leaves. Hunting can be done only along cut trails through the forest; a bird falling twenty feet from the trail is seldom secured, as a few steps through this huipia will generally throw a man down, claw him, and nearly prevent him from getting on his feet. Mosquitoes, fevers, 'nighuas' (a flea that buries itself in the flesh), and everything else that is disagreeable, attend camping in this section."

As to the climate of Tamaulipas, Mr. E. W. Nelson of the United States Biological Survey has been kind enough to furnish me with notes of a general character. He says that the climate, like that of the rest of eastern Mexico, is divided into a wet and a dry season. The wet season begins in June and July and lasts

¹ Altamira, in the extreme southeastern part of the State, was visited in the last eighteen days of December, but owing to the severe malaria which Mr. Armstrong contracted in the humid swamps, the region was not visited again.

till from September to November. The dry season covers the rest of the year, interrupted, however, by cold winter storms which are usually the southern prolongation of Texas "northers." The northern part of the State is subject to severe frosts, but the southern part is beyond the ordinary frost belt. Summer rains are usually plentiful along the coast lowlands, which occupy the largest part of the State, but the northern half is sometimes subject to prolonged and excessive droughts.

The heaviest rains in the State fall in summer along the mountain chain in the western part (Sierra Madre). The southern part has regularly a much greater summer rainfall than the northern half.

Special thanks are due Mr. E. W. Nelson for time generously given in comparing many of our series of birds with those in the National Museum. To Mr. Outram Bangs is due credit for a large share of the work in sorting and arranging specimens as the material came in, and for valuable help.

The collection, of which an annotated list follows, is now merged in the general collections of the Museum of Comparative Zoölogy at Cambridge.

List of Species.

ARDEIDÆ.

Herodias egretta (*Wilson*).—1 ♂, Matamoros, Jan. 24.

Egretta candidissima candidissima (*Gmelin*).—1 ♀, Matamoros, Jan. 23.

Hydranassa tricolor ruficollis (*Gosse*).—1 ♂, Matamoros, Jan. 20.

Nyctanassa violacea violacea (*Linn.*).—1 ♂, Matamoros, June.

Heterocnus cabanisi (*Heine*).—1 ♀, Rio Cruz, May 9.

IBIDIDÆ.

Plegadis guarauna (*Linn.*).—3, both sexes, Matamoros, Jan. 21—Feb. 9.

ANATIDÆ.

Olor buccinator (*Richardson*).—1 ♀, Matamoros, Jan. 21. This is a typical specimen of the species and constitutes its first Mexican record.

Cairina moschata (*Linn.*).—2 ♀: Altamira, Dec. 31; Rio Cruz, May 13.

- Chen hyperboreus hyperboreus** (Pallas).— 1 ♀, Matamoros, Jan. 21.
Chaulelasmus streperus (Linn.).— 3, both sexes, Matamoros, Jan. 20–31.
Mareca americana (Gmel.).— 1 ♂, Matamoros, Jan. 20.
Nettion carolinense (Gmel.).— 1 ♀, Rio Martinez.
Dafila acuta (Linn.).— 4, both sexes, Matamoros, Jan. 26–Feb. 13.
Querquedula discors (Linn.).— 1 ♂, Matamoros, Jan. 18.
Querquedula cyanoptera (Vieill.).— 1 ♂, Matamoros, Jan. 19.
Spatula clypeata (Linn.).— 2 ♂, Matamoros, Feb. 1.
Marila americana (Eyl.).— 1 ♀, Matamoros, Jan. 22.
Marila vallisineria (Wilson).— 3, both sexes, Matamoros, Jan. 25–Feb. 11.
Marila affinis (Eyl.).— 2 ♂, Matamoros, Jan. 26.

FALCONIDÆ.

- Micrastur melanoleucus** (Vieill.).— 1 ♂, Caballeros, Sept. 7.
Geranospizias niger (Du Bus).— 1 ♀, Cañon Guiaves, Sept. 15.
Parabuteo unicinctus harrisi (Aud.).— 3 ♂: Matamoros, Dec. 5–Jan. 31; Altamira, Dec. 17.
Accipiter velox (Wilson).— 3, both sexes: Montelunga, Oct. 12; Altamira, Dec. 20; Galindo, April 22.
Accipiter cooperi (Bonap.).— 1 ♂, Matamoros, Nov. 16.
Buteo borealis calurus Cass.— 1 ♂, Galindo, March 21.
Buteo albicaudatus sennetti Allen.— 5, both sexes: Altamira, Dec. 28–30; Matamoros, Jan. 18.
Asturina plagiata Schlegel.— 7, both sexes: Altamira, Dec. 20–21; Rio Martinez, Feb. 28–March 2; Santa Leonor, March 9; Rio Cruz, May 10–14.
Rupornis griseicauda Ridgw.— Altamira, Dec. 17–22; Caballeros, Sept. 7; Rio Cruz, June 19–24; Santa Leonor, April 14.
Urubitinga anthracina (Litch.).— 3, both sexes: Galindo, March 22; Rio Cruz, May 7–8.
Urubitinga ridgwayi Gurney.— 3, both sexes, Altamira, Dec. 21–Jan. 4.
Elanus leucurus (Vieill.).— 2 ♀, Altamira, Dec. 16, 21.
Falco peregrinus anatum Bonap.— 1 ♂, Matamoros, Jan. 22.
Falco columbarius columbarius Linn.— 1 ♀ (young), Matamoros, Nov. 16.
Falco columbarius richardsoni Ridgw.— 1 ♂, Matamoros, Jan. 25.
Falco fusco-cærulescens Vieill.— 3 ♂: Cañon Guiaves, Sept. 17; Altamira, Dec. 23; Matamoros, Feb. 14.
Cerchneis sparveria phalæna (Lesson).— 2, both sexes, Matamoros, Nov. 8–Dec. 1.

TINAMIDÆ.

Crypturus mexicanus Salvadori.—8, both sexes: Rio Cruz, April 16–July 7; Santa Leonor, April 12–16.

CRACIDÆ.

Crax globicera Linn.—1 ♂, Guiaves, April 31.

Penelope purpurascens Wagler.—2, both sexes, Guiaves, May 4.

Ortalis vetula mcalli Baird.—7, both sexes: Rio Cruz, July 5; Rio Martinez, Feb. 23–March 1; Santa Leonor, March 10.

MELEAGRIDÆ.

Meleagris gallopavo intermedia Sennett.—1 ♂, Rio Cruz, March 9.

ODONTOPHORIDÆ.

Callipepla squamata castanogastris Brewster.—7, both sexes: San Fernando, Oct. 20–27; Aquas Calientes, May 8.

Colinus virginianus texanus Lawrence.—8, both sexes: Matamoros, Aug. 20–Oct. 30; San Fernando, Oct. 19–20.

Colinus virginianus maculatus Nelson.—63, both sexes: Guiaves, Sept. 21–April 31; Rio Santa, Sept. 8; Santa Leonor, Sept. 11–April 15; Rio Cruz, May 6–June 30; Montelunga, April 29; Victoria, April 12; Altamira, Dec. 1–25.

Cyrtonyx montezumæ montezumæ (Vig.)—4, both sexes and 1 chick: Yerba Burna, Sept. 29–30; Rampahuila, Sept. 27; Carricitos, Oct. 15.

RALLIDÆ.

Porzana carolina (Linn.)—1 ♂, Matamoros, Jan. 22.

JACANIDÆ.

Asarcia spinosa (Linn.)—6, both sexes, Dec. 25–31.

CHARADRIIDÆ.

Podasocys montanus (Townsend)—2, both sexes, Matamoros, Nov. 30.

Oxyechus vociferus vociferus (Linn.)—1 ♂, Matamoros, Nov. 18.

Himantopus mexicanus (Müll.)—1 ♂, Matamoros, Feb. 10.

Recurvirostra americana Gmel.—1 ♂, Matamoros, Jan. 12.

Numenius americanus americanus Wilson.—1 ♂, Matamoros, Feb. 11.

- Numenius americanus parvus** *Bishop*.—1 ♂, Matamoros, Jan. 18.
Catoptrophorus semipalmatus semipalmatus (*Gmel.*).—2, both sexes, Matamoros, Jan. 17–21.
Totanus flavipes (*Gml.*).—1 ♂, Rio Cruz, May 11.
Actitis macularia (*Linn.*).—1 ♀, Rio Martinez, Mar. 2.
Gallinago delicata (*Ord.*).—3 ♂, Altamira, Dec. 14–21.

COLUMBIDÆ.

- Columba flavirostris flavirostris** *Wagler*.—6, both sexes: Altamira, Dec. 22; Rio Cruz, July 5–21.
Zenaidura macroura carolinensis (*Linn.*).—1 ♂, Galindo, Oct. 1.
Scardafella inca inca (*Less.*).—13, both sexes: Matamoros, Aug. 19–Nov. 3; San Fernando, Oct. 19–23; Rio Martinez, Feb. 25–March 2.
Chamepelia passerina pallescens *Baird*.—11, both sexes: Matamoros, Aug. 22–Dec. 5; San Fernando, Oct. 30.
Leptotila fulviventris brachyptera (*Salvadori*).—1 ♂, Rio Cruz, June 18.

PSITTACIDÆ.

- Ara militaris** (*Linn.*).—1 ♀, Rio Cruz, June 30.
Conurus aztec (*Souancé*).—10, both sexes, Altamira, Dec. 17–31.
Amazona oratrix *Ridgway*.—1 ♀, Rio Cruz, June 30.
Amazona viridigena *Cassin*.—5, both sexes: Rio Martinez, March 4; Rio Cruz, June 24–July 22; Santa Leonor, April 8.

CUCULIDÆ.

- Coccyzus americanus americanus** (*Linn.*).—5, both sexes: Rampahuila, Sept. 26; Santa Leonor, Sept. 11; Galindo, Oct. 4; Guiaves, Sept. 19.
Crotophaga sulcirostris *Swains*.—5, both sexes: Altamira, Dec. 27–28; Guiaves, Sept. 17–21; Matamoros, Aug. 24.

PICIDÆ.

- Chloronerpes æruginosus** *Licht*.—16, both sexes: Rampahuila, Sept. 28; Rio Santa, Sept. 8; Santa Leonor, Sept. 13; Guiaves, Sept. 21; Portrero, Sept. 24; Rio La Cruz, Sept. 10–July 16; Galindo, March 21–23; Rio Martinez, Feb. 27.
Melanerpes formicivorus formicivorus (*Swainson*).—20, both sexes: Yerba Burna, Sept. 29; Galindo, Oct. 3–March 26; Guiaves, Oct. 9; Realito, May 22–June 16.
Melanerpes aurifrons (*Wagl.*).—14, both sexes: Matamoros, Nov. 4–Dec. 1; San Fernando, Oct. 21–30; Altamira, Dec. 10; Rio La Cruz, June 18.

Sphyrapicus varius varius (*Linn.*).— 14, both sexes: Matamoros, Nov. 27–Dec. 3; Galindo, March 15–April 23.

Dryobates villosus intermedius *Nelson.*— 4, both sexes: Galindo, Oct. 1–April 20; Montelunga, Oct. 10–April 29.

Dryobates scalaris bairdi (*Scl.*).— 11, both sexes: Matamoros, Aug. 17–Dec. 4; San Fernando, Oct. 24–27; Altamira, Dec. 13; Rio Martinez, Feb. 24.

Campephilus guatemalensis guatemalensis (*Harl.*).— 4, both sexes: Santa Leonor, March 9–April 13; Rio Cruz, July 8.

Ceophlœus scapularis scapularis (*Vigors.*).— 12, both sexes: Altamira, Dec. 2–20; Rio Santa, Sept. 8; Santa Leonor, Sept. 12, Mar. 13; Cañon Guiaves, Sept. 16; Rio Martinez, Mar. 4.

TROGONIDÆ.

Trogon mexicanus *Swains.*— 21, both sexes (including specimens in nesting and moulting plumage): Rampahuila, Sept. 28; Galindo, Oct. 1–May 23; Guiaves, Sept. 20; Rio Santa, Sept. 8; Montelunga, Oct. 11; Altamira, Dec. 20; Realito, June 4.

Trogon ambiguus *Gould.*— 37, both sexes: Santa Leonor, March 9–April 14; Rio Martinez, March 1–3; Galindo, March 16–April 20; Guiaves, May 1; Montelunga, April 27; Rio Cruz, June 25; Realito, May 24–July 16.

MOMOTIDÆ.

Momotus cæruleiceps (*Gould.*).— 15, both sexes: Caballeros, Sept. 7; Rio Martinez, Feb. 23–March 11; Rio Cruz, June 27–July 6.

ALCEDINIDÆ.

Ceryle torquata (*Linn.*).— 4, both sexes: Rio Martinez, March 2; Rio Cruz, May 11.

Ceryle alcyon (*Linn.*).— 1 ♂, Altamira, Dec. 21.

Ceryle americana septentrionalis *Sharpe.*— 7, both sexes: Rio La Cruz, Sept. 10; Santa Leonor, Sept. 13; Rio Martinez, Sept. 9–March 3; Caballeros, Sept. 6.

STRIGIDÆ.

Strix virgata tamaulipensis subsp. nov.

Type (and only specimen), Rio Martinez, State of Tamaulipas, Mexico, Feb. 25, adult ♂, No. 49982, Museum of Comparative Zoölogy.

Characters.— Similar to true *Strix virgata* of southeastern Mexico and Central America, with transverse pale lines on the head and back, as in that form. Not with the pale markings above in the form of spots as in

S. v. squamulata of western Mexico, but with the general color of the upper parts even paler and grayer than in the latter form.

Measurements.—Type, adult ♂, wing, 243; tail, 145; tarsus, 46; culmen from forward edge of cere, 18.

Remarks.—This bird comes from the dry mountains of western Tamaulipas where the conditions are more arid than further south.

Otus asio mcalli (*Cass.*).—2, both sexes, Rio Martinez, Feb. 26; Santa Leonor, March 31.

Speotyto cunicularia hypogæa (*Bonap.*).—9, both sexes, Matamoros, Nov. 5–Feb. 14; Altamira, Dec. 12.

Glaucidium gnoma gnoma (*Wagler*).—3, both sexes, Galindo, March 21–27.

Glaucidium phalænoides ridgwayi *Sharpe*.—9, both sexes: Matamoros, Aug. 16; Rio Martinez, Feb. 24–March 5; Santa Leonor, April 3–4; Rio Cruz, June 20; Guiaves, April 31.

Asio flammeus (*Pontoppidan*).—1 ♂, Matamoros, Dec. 1.

CAPRIMULGIDÆ.

Chordeiles virginianus henryi *Cass.*.—3, both sexes: Matamoros, Aug. 15–23; Montelunga, April 30.

Chordeiles acutipennis texensis *Lawr.*.—11, both sexes: Rio Cruz, June 19–July 20; Santa Leonor, April 14–17; Montelunga, April 28–29.

Nyctidromus albicollis merrilli *Sennett.*.—29, both sexes: Matamoros, Aug. 24–Nov. 26; San Fernando, Oct. 19–28; Altamira Dec. 13–19; Santa Leonor, April 16; Rio Cruz, July 2.

Antrostomus notabilis *Nelson.*.—8, both sexes: Santa Leonor, April 14–16; Rio Cruz, June 28–July 4.

Only two or three specimens of this bird were known to science until this series was secured.

Antrostomus vociferus macromystax (*Wagler*).—25, both sexes: Galindo, Oct. 5–April 24; Santa Leonor, April 12–13; Montelunga, April 26; Realito, May 27–June 7.

MICROPODIDÆ.

Chætura richmondi *Ridgway.*.—2, both sexes: Carricitos, Oct. 15; Guiaves, Oct. 8.

TROCHILIDÆ.

Amizilis cerviniventris chalconota *Oberholser.*.—30, both sexes: Altamira, Dec. 11–23; Matamoros, Aug. 27; Santa Leonor, March 8–April 8; Rio Cruz, June 25–July 5.

Phæoptila latirostris (*Swainson*).—20, both sexes: Santa Leonor, March 3–April 28; Realito, June 2.

Hylocharis leucotis (*Vieill.*).—11, both sexes: Galindo, March 14–April 20; Realito, May 31–June 8.

Eugenes fulgens (*Swainson*).—17, both sexes: Rampahuila, Sept. 26–28; Galindo, March 16–April 19; Realito, June 1–6.

Cœligena clemenciæ (*Less.*).—7, both sexes, Galindo, March 19–April 19.

Archilochus colubris (*Linn.*).—7, both sexes: Yerba Burna, Sept. 30; Galindo, Oct. 5–March 22; Rampahuila, Sept. 28; Guiaves, Oct. 7; Santa Leonor, April 5–6.

Selasphorus platycercus (*Swains.*).—1 ♀, Santa Leonor, April 3.

Atthis heloisa (*Less & Delattre*).—10, both sexes: Galindo, April 18–25; Realito, May 27–June 10.

DENDROCOLAPTIDÆ.

Xiphorhynchus flavigaster flavigaster *Swains.*—2 ♀, Altamira, Jan. 1.

Picolaptes affinis affinis (*Lafr.*).—11, both sexes: Galindo, Oct. 1–March 21; Realito, May 22–June 3.

COTINGIDÆ.

Platypsaris aglaiæ aglaiæ (*Lafr.*).—12, both sexes: Galindo, Oct. 4; Rio Santa, Sept. 8; Altamira, Dec. 24; Rio Martinez, Feb. 28–March 4; Santa Leonor, March 7–10; Rio Cruz, July 12–21.

TYRANNIDÆ.

Camptostoma imberbe *Sclater.*—3 ♂: Guiaves, Sept. 15–21; Altamira, Dec. 11.

Myiozetetes texensis texensis (*Giraud*).—5, both sexes, Altamira, Dec. 10–Jan. 1.

Pyrocephalus rubinus mexicanus (*Scl.*).—18, both sexes: Matamoros, Aug. 22–Dec. 5; San Fernando, Oct. 28; Altamira, Dec. 14–24.

Nuttallornis borealis (*Swains.*).—10, both sexes: Galindo, Oct. 1–5; Guiaves, Oct. 7–9; Portrero, Sept. 24; Realito, Jan. 1–5; Montelunga, April 29.

Myiochanes pertinax pallidiventris (*Chapman*).—23, both sexes: Rampahuila, Sept. 26–27; Yerba Burna, Sept. 29; Montelunga, April 29; Realito, May 28–June 8; Galindo, March 14–27.

Remarks.—This large series represents *pallidiventris* in its extreme form. The upper parts are grayer than in birds from Arizona and Sonora, especially about the neck. The under parts do not differ, and the wing measurements are the same.

Myiochanes virens (*Linn.*).—4, both sexes: Matamoros, Aug. 28–Sept. 1; Caballeros, Sept. 6; Montelunga, April 27.

Myiochanes richardsonii richardsonii (*Swains.*).—8, both sexes: Rampahuila, Sept. 27; Santa Leonor, Sept. 11; Guiaves, Sept. 18–Oct. 7; Montelunga, April 28–30.

Empidonax flaviventris (*Baird*).—9, both sexes: Matamoros, Aug. 25–30; San Fernando, Oct. 21; Guiaves, Sept. 20; Galindo, March 16–20; Rio Martinez, Feb. 28.

Empidonax trailli trailli (*Aud.*).—12, both sexes: Matamoros, Aug. 16–Aug. 30; Guiaves, Sept. 22.

Empidonax minimus (*Baird*).—11, both sexes: Matamoros, Aug. 19–30; Rio Martinez, Sept. 9; Rio Cruz, Sept. 10; Caballeros, Sept. 7; Altamira, Dec. 13–14; Santa Leonor, April 9.

Empidonax hammondi (*Xantus*).—10, both sexes: Galindo, March 14–20.

Empidonax wrighti *Baird*.—1 ♂, Galindo, March 18.

Empidonax difficilis difficilis *Baird*.—4, both sexes, Galindo, March 19–22.

Sayornis phœbe (*Latham*).—22, both sexes: Matamoros, Oct. 27–Dec. 1; San Fernando, Oct. 21–25; Rio Martinez, Feb. 25–March 4; Galindo, March 17.

Sayornis saya (*Bonap.*).—2 ♀: San Fernando, Oct. 26; Matamoros, Nov. 6.

Myiarchus crinitus crinitus (*Linn.*).—2, both sexes: Yerba Burna, Sept. 29; Montelunga, Oct. 13.

Myiarchus magister nelsoni *Ridgway*.—4, both sexes: Yerba Burna, Sept. 29; Portrero, Sept. 24; Matamoros, Aug. 13; Carricitos, Oct. 14.

Myiarchus lawrenci lawrenci (*Giraud*).—18, both sexes: Altamira, Jan. 1; Yerba Burna, Sept. 30; Montelunga, Oct. 12; Galindo, Oct. 4; Altamira, Jan. 1; Rio Martinez, Feb. 25–27; Rio Cruz, June 28–July 8; Santa Leonor, April 3–12.

Myiodynastes luteiventris *Sclater*.—1 ♀, Galindo, April 26.

Pitangus sulphuratus derbianus (*Kaup*).—20, both sexes: Altamira, Dec. 13–25; Guiaves, Sept. 21; Rio Martinez, Feb. 25–March 1.

Tyrannus melancholicus couchii (*Baird*).—7, both sexes: Altamira, Dec. 14–31; Santa Leonor, Sept. 11–12; Matamoros, Aug. 30; San Fernando, Oct. 19.

Muscivora forficata (*Gmel.*).—21, both sexes, San Fernando, Oct. 19–29.

ALAUDIDÆ.

Otocoris alpestris giraudi *Henshaw*.—8, both sexes, Matamoros, Aug. 21–29.

MIMIDÆ.

Toxostoma longirostre sennetti (*Ridgway*).—5, both sexes: Matamoros, Nov. 2–20; Altamira, Dec. 10; Galindo, March 17; Rio Cruz, June 20.

Toxostoma curvirostre curvirostre (*Swains.*)—11, both sexes: Matamoros, Nov. 3–Dec. 6.

Dumetella carolinensis (*Linn.*)—2, both sexes, Altamira, Dec. 13.

Mimus polyglottos leucopterus (*Vigors.*)—1 ♂, Matamoros, Nov. 6.

TURDIDÆ.

Catharus mexicanus smithi *Nelson.*—25, both sexes: Galindo, Oct. 4–April 20; Rampahuila, Sept. 27; Montelunga, April 26–29; Realito, May 22–June 11.

Remarks.—This form, which belongs to these mountains, was described by Nelson from a single specimen. It differs but slightly from true *mexicanus* of the uplands of Vera Cruz, one of the rarest of Mexican birds.

Catharus occidentalis fulvescens *Nelson.*—7, both sexes, Galindo, March 17–April 24.

Hylocichla guttata guttata (*Pallas.*)—3, both sexes: Santa Leonor, March 10; Rio Martinez, March 2; Galindo, March 25.

Hylocichla guttata nana (*Aud.*)—3, both sexes, Oct. 11–28.

Hylocichla guttata sequoiensis (*Belding.*)—7, both sexes: Galindo, March 17–25, April 20; Montelunga, April 26.

Hylocichla guttata auduboni (*Baird.*)—10, both sexes: Galindo, March 16–26; Montelunga, Oct. 11.

Hylocichla ustulata swainsoni (*Cabanis.*)—1 ♂, Galindo, April 24.

Planesticus migratorius propinquus (*Ridgway.*)—9, both sexes: 3, Galindo, March 15–22; 6, Realito, May 30–June 16 (only 2 males).

Remarks.—The resident birds of this region average a little smaller than true *propinquus* as recognized by Ridgway in 'Birds of North and Middle America.' Average length of wing of seven females 126, of two males 130. The series also averages a little paler than true *propinquus*, and possibly there is sufficient difference to warrant separation.

Planesticus grayi tamaulipensis (*Nelson.*)—6, both sexes: Galindo, March 16–April 22; Realito, May 31–June 5.

Sialia sialis fulva *Brewster.*—15, both sexes: Montelunga, Oct. 13–April 29; Carricitos, Oct. 15–16; Yerba Burna, Sept. 30; Rampahuila, Sept. 27; Galindo, Oct. 3–March 27; Realito, May 29–June 1.

Myadestes obscurus occidentalis *Stejneger.*—5, both sexes: Montelunga, Sept. 25–April 30; Realito, June 11; Santa Leonor, April 5

SYLVIIDÆ.

Regulus calendula calendula (*Linn.*)—15, both sexes: Matamoros, Nov. 26–29; Guiaves, Sept. 15; Altamira, Dec. 10–14; Galindo, March 23–24; Santa Leonor, March 9–11.

Polioptila cærulea cærulea (*Linn.*)—15, both sexes: Carricitos, Oct. 14; Guiaves, Sept. 17–20; Matamoros, Aug. 26–Nov. 28; Galindo

Oct. 2; Santa Leonor, Sept. 13; San Fernando, Oct. 25; Altamira, Dec. 11-12; Rio Martinez, March 3.

Remarks.—In this series the wing in the males runs from 50 to 54 mm. and in the females from 49 to 52 mm., thus all would appear to belong to the northern migratory form.

TROGLODYTIDÆ.

Heleodytes brunneicapillus couesi (*Sharpe*).—3, both sexes, Matamoros, Dec. 3-6.

Heleodytes narinus spec. nov.

6, both sexes: Carricitos, Oct. 15; Galindo, Oct. 1-March 22; Guiaves, Oct. 6-9.

Type from Galindo, Tamaulipas, Mexico; adult ♀, No. 49964, Mus. Comp. Zoöl. Collected March 22, 1909, by F. B. Armstrong.

Characters.—Similar to *H. jocosus* (Sclater) of Oaxaca City, Mexico, but differing in having a much shorter and stouter bill, the spots below smaller and less numerous; flanks much less distinctly barred with dusky. The nestling plumage shows the underparts practically unspotted, whereas in the nestling of *H. jocosus* the underparts are thickly covered with small dusky spots.

Measurements. (Four adults.)

	Wing.	Tail.	Tarsus.	Culmen.	Breadth of bill at mid nostril.
♂	72	58	24	20	5
♂	69	67	25	16	4
♀	75	66	24	20	5
♀	66	59	23	18	4

It appears from the small series available that this bird is very distinctly different from *H. jocosus* of the western slope of Mexico.

Pheugopedius maculipectus maculipectus (*Lafr.*).—24, both sexes: Guiaves, Sept. 20; Rio Cruz, Sept. 10-July 15; Santa Leonor, March 7-April 13.

Thryothorus ludovicianus berlandieri (*Baird*).—25, both sexes: Galindo, Oct. 5-March 23; Santa Leonor, Sept. 13-April 21; Guiaves, Oct. 6-7; Rampahuila, Sept. 28; Rio Cruz, July 19-22; Realito, May 29-June 3.

Thryothorus ludovicianus lomitensis *Sennett*.—6, both sexes: Matamoros, Aug. 28-Nov. 29; San Fernando, Oct. 19-25.

Thryomanes bewickii cryptus *Oberholser*.—23, both sexes: Matamoros, Aug. 18-Dec. 6; San Fernando, Oct. 21; Guiaves, Sept. 18.

Troglodytes ædon parkmani *Aud.*—14, both sexes: Matamoros, Oct. 10-Nov. 29; Montelunga, Oct. 10-April 29; San Fernando, Oct. 29; Realita, May 27-June 13; Galindo, March 15.

Troglodytes brunneicollis cahooni *Brewster*.— 9, both sexes, Galindo, March 14–26.

Nannorchilus leucogaster leucogaster (*Gould*).— 1 ♂, Altamira, Jan. 1.

CERTHIIDÆ.

Certhia familiaris albescens *Berlepsch*.— 11, both sexes: Galindo, Oct. 3–March 25; Montelunga, Oct. 11–April 27; Realito, May 23–June 10.

SITTIDÆ.

Sitta carolinensis mexicana *Nelson & Palmer*.— 1 ♂, Galindo, March 25.

PARIDÆ.

Bæolophus atricristatus atricristatus (*Cassin*).— 27, both sexes: Matamoros, Aug. 15–Nov. 25; Guiaves, Sept. 15–20; Santa Leonor Sept. 11–March 15; San Fernando, Oct. 21–25; Rio Martinez, March 3–26.

Bæolophus wollweberi wollweberi (*Bonap.*).— 21, both sexes: Rampahuila, Sept. 28–29; Yerba Burna, Sept. 29; Carricitos, Sept. 30–Oct. 14; Montelunga, Sept. 25; Galindo, Oct. 3–March 22; Guiaves, Oct. 6; Portrero, Sept. 24–Oct. 3.

Auriparus flaviceps flaviceps (*Sundevall*).— 6, both sexes: Matamoros, Aug. 23–Dec. 6.

CORVIDÆ.

Corvus mexicanus *Gmel.*— 8, both sexes: Santa Leonor, March 11–18; Rio Cruz, June 18–July 16.

Psilorhinus morio morio (*Wagler*).— 15, both sexes: Altamira, Dec. 17–Jan. 4; Santa Leonor, March 8–April 10; Rio Cruz, July 10–20; Guiaves, Sept. 15.

Remarks.— Four of the skins from Altamira approach very closely to *Psilorhinus morio fuliginosus* (*Lesson*) one of them being almost referable to that form, but all others from the same place (Altamira) are typical *P. morio morio*.

Xanthoura luxuosa glaucescens *Ridgway*.— 27, both sexes: Matamoros, Oct. 25–Dec. 13; San Fernando, Oct. 20–30; Rio Martinez, Feb. 26–March 3; Rio Cruz, June 1–2.

Aphelocoma sieberi couchi (*Baird*).— 17, both sexes: Carricitos, Oct. 15; Galindo, Oct. 4–March 26; Santa Leonor, Sept. 11; Realito, May 26–June 5.

LANIIDÆ.

Lanius ludovicianus excubitorides (*Swainson*).—4, both sexes: Matamoros, Nov. 24–30; San Fernando, Oct. 24.

VIREONIDÆ.

Vireosylva olivacea (*Linn.*).—1 ♂, Matamoros, Aug. 21.

Vireosylva gilva swainsoni (*Baird*).—5, both sexes, Galindo, March 14–27.

Lanivireo flavifrons (*Vicillot*).—1 ♂, Matamoros, Aug. 25.

Lanivireo solitarius solitarius (*Wilson*).—10, both sexes: Galindo, Oct. 2; Guiaves, Sept. 17; San Fernando, Oct. 25; Montclunga, Oct. 11–April 27; Realito, May 30–June 6.

Remarks.—There are four breeding birds from Realito, May 30–June 6, and two from Montclunga, April 26–27. These are very close to northern specimens of true *solitarius*, though they differ slightly in the line of demarcation between the colors of the head and back being rather more sharply drawn, and the head slightly bluer. On the whole, however, we are surprised to find these local birds, breeding in the mountains of eastern Mexico so very close to migrants and northern examples. Four breeding males have a wing average of 72.5, while two breeding females have a wing average of 73.

Vireo atricapillus *Woodhouse*.—1 ♂, Santa Leonor, April 12.

Vireo griseus griseus (*Boddaert*).—4 ♂: San Fernando, Oct. 10; Altamira, Dec. 10–14.

Remarks.—These are wholly referable to the northern bird both in color and size.

Vireo griseus micrus (*Nelson*).—30, both sexes: Matamoros, Aug. 20–Dec. 6; San Fernando, Sept. 16–Oct. 30; Guiaves, Sept. 14–21; Rio Santa, Sept. 8; Caballeros, Sept. 7; Santa Leonor, Sept. 11–April 2; Rio Martinez, March 3; Rio Cruz; Sept. 10; Altamira, Dec. 11–12.

Remarks.—In this large series the wing runs very constantly from 54 to 58 mm. Most of the specimens are extreme of this small, dull colored race, and have been so pronounced by Mr. Nelson, who examined some of them. A few, however, are not quite typical and may have migrated from an intermediate region.

Vireo huttoni mexicanus *Ridgway*.—7: Yerba Buena, Sept. 29; Galindo, Oct. 4–March 27; Rampahuila, Sept. 28.

Vireo belli belli *Aud.*—8: Guiaves, Sept. 18–22; Galindo, Oct. 5; Caballeros, Sept. 6; Rio Santa, Sept. 8.

HIRUNDINIDÆ.

Riparia riparia (*Linn.*).—4, both sexes, Matamoros, Aug. 21–29.

Cheledon¹ erythrogastra (*Boddaert*).—3 ♂, Matamoros, Aug. 18–Sept. 2.

MOTACILLIDÆ.

Anthus rubescens (*Tunstall*).—4, both sexes: Matamoros, Nov. 27–30; Altamira, Dec. 14.

Anthus spraguei (*Aud.*).—6, both sexes, Matamoros, Nov. 27–30.

MNIOTILTIDÆ.

Mniotilta varia (*Linn.*).—12, both sexes: Matamoros, Aug. 21–Nov. 27; Altamira, Dec. 12; Guiaves, Sept. 18; Galindo, March 23–25.

Helinaia swainsoni *Aud.*—1 ♀, Matamoros, Aug. 29.

Helmitheros vermivorus (*Gmel.*).—1 ♂, Matamoros, Aug. 22.

Vermivora pinus (*Linn.*).—1 ♂, Matamoros, Aug. 25.

Vermivora celata celata (*Say*).—31, both sexes: Matamoros, Oct. 30–Dec. 6; Altamira, Dec. 10–12; San Fernando, Oct. 21–29; Galindo, March 25.

Remarks.—Some of these specimens may have come from an intermediate breeding ground, though none are quite referable to *V. c. lutescens*.

Vermivora rubricapilla rubricapilla (*Wilson*).—9, both sexes: Matamoros, Oct. 11–Nov. 28; San Fernando, Oct. 19–22; Galindo, March 13–15; Rio Martinez, March 2; Montelunga, April 27.

Oreothlypis superciliosa (*Hartlaub*).—24, both sexes: Rampahuila, Sept. 28; Montelunga, Sept. 25; Galindo, March 14–26; Realito, May 31–June 11.

Compothlypis americana ramalinæ *Ridgway*.—2, both sexes: Matamoros, Aug. 22; Altamira, Dec. 16.

Remarks.—Both these specimens appear to be referable to this subspecies.

Compothlypis pitiayumi nigrilora (*Coues*).—19, both sexes: Matamoros, Aug. 22; Altamira, Dec. 11–24; Caballeros, Sept. 6; Santa Leonor, Sept. 11–April 16; Guiaves, Sept. 20; Rio Cruz, May 7–June 8; Montelunga, April 27–30.

Peucedramus olivaceus (*Giraud*).—8, both sexes: Montelunga, Oct. 11–April 27; Galindo, Oct. 4–March 25; Yerba Burna, Sept. 29; Realito, May 22–26.

Dendroica æstiva æstiva (*Gmel.*).—4, both sexes: Rio Cruz, May 10; Guiaves, Sept. 14–19.

¹ Cf. Hartert, *Die Vögel der Paläarktischen Fauna*, VI, June, 1910, p. 799.

***Dendroica æstiva ineditus* subsp. nov.**

14, both sexes: Matamoros, Aug. 15–Sept. 3.

Type from Matamoros, Tamaulipas, Mexico; No. 49970, Mus. Comp. Zoöl. Adult ♂, collected Aug. 19, 1908, by F. B. Armstrong.

Characters.—Most nearly like *D. æ. dugesi* Coale, but slightly smaller, and the female very different in color, being bright yellow below, and dull greenish yellow above instead of grayish. Also somewhat similar to *D. æ. sonora* Brewster in general coloration of the male, but much larger, and the female more brightly colored — yellower below and more greenish above.

This form, which probably occupies the whole coast region of northern Tamaulipas up to the Rio Grande Valley of Texas is strikingly different from the other geographical races of *D. æstiva*. It is at once distinguished from *D. æstiva æstiva* by larger size, duller and more yellowish coloration, with the crown of the male always dull yellow and the back always unstriped. It is larger than *D. æ. sonora*, of western Mexico, and slightly different in color, especially the female. It is only slightly smaller than *D. æ. dugesi*, which form it also most nearly resembles in coloration, the males of the two being very nearly alike. The female, however, is wholly different from the female of *D. æ. dugesi* in color, being hardly distinguishable in this respect from the female of *D. æstiva æstiva*, from which its greater size separates it at once.

No.	Sex.	Wing.	Tail.	Tarsus.	Culmen.
49970	♂	65	45	18	9
49971	♂	65	45	18	11
49977	♂	66	47	18	10
49978	♂	65	44	18	10
49974	♂	62	45	17	10
49973	♂	64	44	16	10
49972	♂	63	45	18	11
49976	♂	63	47	18	10
49975	♂	62	43	17	10
49979	♀	60	43	18	10
49981	♀	61	44	17	10
49980	♀	61	42	17	10
A	♂	64	44	17	10
B	♀	59	44	17	10

***Dendroica coronata* (Linn.)**.—12, both sexes: Matamoros, Nov. 10–Dec. 5; Altamira, Dec. 12–15; Galindo, March 15–23.

***Dendroica auduboni auduboni* (Townsend)**.—9, both sexes: Matamoros, Dec. 1; San Fernando, Oct. 22; Galindo, March 14–23.

***Dendroica townsendi* (Townsend)**.—2, both sexes, Montelunga Oct. 10 and April 30.

Dendroica virens (*Gmel.*).— 23, both sexes: San Fernando, Oct. 25–26; Altamira, Dec. 14–31; Galindo, March 14–April 19; Santa Leonor, March 10–April 14; Montelunga, April 26–28.

Dendroica chrysoparia *Sclater & Salvin.*— 3, both sexes, Galindo, March 14–22.

Dendroica occidentalis (*Townsend*).— 2, both sexes: Guiaves, Oct. 7; Galindo, March 19.

Dendroica dominica albilora *Ridgway.*— 1 ♂, Guiaves, Sept. 18.

Remarks.— This specimen is not quite typical, having too large a bill, and the character of the outer tail feathers about intermediate between *D. d. dominica* and *D. d. albilora*.

Oporornis formosa (*Wilson*).— 3, both sexes, Matamoros, Aug. 26–Sept. 2.

Oporornis philadelphia (*Wilson*).— 11, both sexes: Matamoros, Aug. 16–31; Guiaves, Sept. 22.

Oporornis tolmiei (*Townsend*).— 1 ♂, Rio Cruz, May 12.

Seiurus aurocapillus (*Linn.*)— 2, both sexes: San Fernando, Oct. 28; Montelunga, April 26.

Seiurus motacilla (*Vieillot*).— 1 ♂, Guiaves, Sept. 18.

Geothlypis trichas brachidactyla (*Swainson*).— 21, both sexes: Matamoros, Aug. 14–27 and Nov. 23, including one ♀ still in nestling plumage (Aug. 14); San Fernando, Oct. 30–31; Altamira, Dec. 11–15; Rio Cruz, May 6–12.

Remarks.— If true *G. trichas* and *G. trichas brachidactyla* are kept distinct as was done by Ridgway, these skins will all go rather better with *brachidactyla*.

Icteria virens virens (*Linn.*).— 12, both sexes: Matamoros, Aug. 10–Sept. 3; Rampahuila, Sept. 26; Caballeros, Sept. 6; Altamira, Dec. 12.

Wilsonia pusilla pusilla (*Wilson*).— 5, both sexes: Rio Santa, Sept. 8; Matamoros, Aug. 31; Guiaves, Sept. 14–20; Altamira, Dec. 12.

Wilsonia pusilla pileolata (*Pallas*).— 25, both sexes: Guiaves, Sept. 12–18; Rio Martinez, Sept. 9–Feb. 24; Altamira, Dec. 11–Jan. 1; Galindo, March 18–25; Santa Leonor, March 8–9; Rio Cruz, Jan. 20–July 22.

Wilsonia canadensis (*Linn.*).— 11, both sexes; Matamoros, Aug. 19–Sept. 1.

Setophaga picta picta (*Swainson*).— 12, both sexes: Rampahuila, Sept. 26–27; Portrero, Sept. 24; Rio Martinez, Feb. 27; Galindo, March 15–23; Realito, May 23–June 3.

Euthlypis lachrymosa lachrymosa *Cabanis.*— 1 ♂, Santa Leonor, April 3.

Basileuterus belli belli (*Giraud*).— 6, both sexes: Montelunga, Oct. 11; Rampahuila, Sept. 26; Carricitos, Oct. 14; Galindo, Oct. 1.

Basileuterus ruffrons jouyi *Ridgway.*— 43, both sexes: Galindo, Oct. 1–March 23; Guiaves, Sept. 25–Oct. 8; Montelunga, Sept. 25–Oct. 13; Yerba Burna, Sept. 29–30; Rampahuila, Sept. 26–28; Santa Leonor, March 7–April 7; Rio Cruz, June 15–July 20.

Basileuterus culicivorus brasherii (*Giraud*).— 54, both sexes: Santa Leonor, Sept. 12–April 11; Caballeros, Sept. 6–7; Guiaves, Sept. 17–22; Rio Martinez, March 1; Rio Cruz, June 19–July 17.

ICTERIDÆ.

Molothrus ater ater (*Boddaert*).— 2 ♀, Matamoros, Nov. 26.

Remarks.— Typical of the eastern race.

Megaquiscalus major macrourus (*Swainson*).— 4 ♂, Matamoros, Nov. 17–21.

Icterus melanocephalus auduboni (*Giraud*).— 15, both sexes: Galindo, Oct. 2–4; San Fernando, Oct. 19; Altamira, Jan. 1; Rio Martinez, March 1–Feb. 27; Santa Leonor, April 1; Rio Cruz, June 27–July 7; Realito, June 7–13.

Icterus gularis tamaulipensis *Ridgway*.— 11, both sexes: Altamira, Dec. 8–24; Santa Leonor, Sept. 12; Guiaves, Sept. 15.

Icterus cucullatus sennetti *Ridgway*.— 3, both sexes, Matamoros, Aug. 24–29.

Icterus galbula (*Linn.*).— 4, both sexes: Santa Leonor, Sept. 11–13; Galindo, Oct. 1; Guiaves, Sept. 17.

Icterus bullocki (*Swainson*).— 5, both sexes: Guiaves, Sept. 16–Oct. 6; Galindo, Oct. 4; Yerba Burna, Sept. 30; Montelunga, April 27.

Agelaius phœniceus richmondi *Nelson*.— 18, both sexes: Matamoros, Aug. 23–Nov. 28; San Fernando, Oct. 20–25.

Sturnella neglecta *Aud.*— 4 ♀, Matamoros, Nov. 19–25.

TANGARIDÆ.

Piranga rubra rubra (*Linn.*).— 5, both sexes: Matamoros, Aug. 26–27; Carricitos, Oct. 15; Rio Martinez, Feb. 24; Galindo, April 20.

Piranga hepatica dextra *Bangs*.— 36, both sexes: Matamoros, Nov. 9; Rampahuila, Sept. 26–28; Galindo, Oct. 1–March 26; Carricitos, Oct. 15; Montelunga, Oct. 12; Realito, May 22–June 8.

Piranga bidentata sanguinolenta (*Laf.*).— 21, both sexes: Galindo, March 15–25; Realito, April 20–June 13; Montelunga, April 31.

FRINGILLIDÆ.

Loxia curvirostra stricklandi *Ridgway*.— 2 ♂, Galindo, March 20–27.

Spinus pinus pinus (*Wilson*).— 5, both sexes, Galindo, March 15–April 29.

Astragalinus tristis pallidus (*Mearns*).— 1 ♂, Santa Leonor, March 9.

Astragalinus psaltria psaltria (*Say*).— 9, both sexes (one young ♀, Galindo, Oct. 1, has no white whatever on the tail; another young ♀ has only a trace of it): Galindo, Oct. 1; Rampahuila, Sept. 26–28; Yerba

Burna, Sept. 29-30; Guiaves, Oct. 7; Montelunga, Oct. 13; Rio Martinez, March 4.

Passer domesticus (*Linn.*).—1 ♀, Matamoros, Aug. 17.

Calamospiza melanocorys *Stejneger*.—3 ♂, Matamoros, Nov. 27-Dec. 1.

Spiza americana (*Gmel.*).—5, both sexes, Matamoros, Aug. 18-26.

Chondestes grammacus strigatus (*Swainson*).—12, both sexes. Matamoros, Aug. 28-Dec. 4; San Fernando, Oct. 16; Montelunga, April 26; Rio Cruz, July 1.

Poœcetes gramineus gramineus (*Gmel.*).—3, both sexes, Matamoros, Nov. 5-Dec. 2.

Passerculus sandwichensis savanna (*Wilson*).—6, both sexes: Matamoros, Nov. 7-20.

Remarks.—These specimens comprise a rather puzzling series, with some probable intermediates.

Passerculus sandwichensis alaudinus (*Bonaparte*).—8, both sexes: Matamoros, Nov. 7-Dec. 3; Altamira, Dec. 15; San Fernando, Oct. 25.

Ammodramus savannarum australis *Maynard*.—2 ♂: Altamira, Dec. 12; Galindo, March 17.

Aimophila ruficeps eremœca (*Brown*).—3 ♂, Guiaves, Oct. 7-9.

Aimophila ruficeps boucardi (*Sclater*).—23, both sexes, young and adults: Rampahuila, Sept. 26-28; Carricitos, Oct. 15; Guiaves, Oct. 6-9; Montelunga, Oct. 10-April 29; Yerba Burna, Sept. 30; Galindo, March 15-April 18; Realito, May 22-June 6.

Remarks.—Most of the specimens listed above are typical of *boucardi* though some few appear to be somewhat intermediate between this and *eremœca*.

Aimophila cassini (*Woodhouse*).—8, both sexes: Matamoros, Aug. 17-Nov. 25.

Aimophila botterii botterii (*Sclater*).—9, both sexes: Matamoros, Aug. 13-Sept. 13.

Amphispiza bilineata bilineata (*Cassin*).—25, both sexes: Matamoros, Aug. 18-Dec. 5; San Fernando, Aug. 24-27.

Junco phœnotus phœnotus *Wagler*.—3, both sexes: Galindo, March 20-27.

Spizella passerina arizonæ *Coues*.—30, both sexes: Santa Leonor, April 4; Montelunga, April 27; Galindo, March 14-April 19.

Remarks.—Most of these skins are typical of this form, though a few somewhat approach *mexicana*, none, however, being quite referable to it.

Spizella pusilla arenacea *Chadbourne*.—5 ♂, Matamoros, Nov. 9-Dec. 3.

Spizella pallida (*Swainson*).—10, both sexes: Matamoros, Nov. 4-Dec. 1; San Fernando, Oct. 30.

Zonotrichia leucophrys leucophrys (*Forster*).—12, both sexes, Matamoros, Nov. 4-Dec. 1.

Zonotrichia leucophrys gambeli (*Nuttall*).—1 ♂, Matamoros, Nov. 25.

Melospiza lincolni lincolni (*Aud.*).—20, both sexes: San Fernando, Oct. 22–30; Altamira, Dec. 17–18; Matamoros, Nov. 20–27; Galindo, March 14–29; Santa Leonor, March 8–April 14.

Pipilo maculatus montanus *Swarth.*—1 ♂, Galindo, March 15.

Arremonops rufivirgatus rufivirgatus (*Lawrence*).—32, both sexes: Matamoros, Aug. 21–Dec. 1; Guiaves, Sept. 14–21; Rio Cruz, Sept. 10–July 7; Rio Santa, Sept. 8; San Fernando, Oct. 30; Caballeros, Sept. 7; Altamira, Dec. 10–15; Rio Martinez, Feb. 24–March 4.

Atlapetes pileatus dilutus *Ridgway.*—37, both sexes: Guiaves, Oct. 6–8; Montelunga, Oct. 12; Yerba Burna, Sept. 29; Carricitos, Oct. 15–16; Galindo, Oct. 3–March 26; Portrero, Sept. 24; Rampahuila, Sept. 28; Realito, May 23–June 2.

Sporophila moreletii sharpei *Lawrence.*—8, both sexes: Matamoros, Aug. 21–Nov. 24; Altamira, Dec. 17.

Passerina cyanea (*Linn.*).—2 ♀, San Fernando, Oct. 21–23.

Passerina ciris (*Linn.*).—4, both sexes: Matamoros, Aug. 24–25; San Fernando, Oct. 27; Altamira, Dec. 15.

Passerina versicolor versicolor (*Bonap.*).—6, females and young males: Matamoros, Aug. 23–27; Guiaves, Sept. 16–Oct. 7.

Cyanocompsa parellina parellina (*Bonap.*).—26, both sexes: Guiaves, Sept. 20–April 31; Carricitos, Oct. 15; Rio Martinez, Feb. 24; Rio Cruz, Jan. 20–July 1; Altamira, Dec. 10–Jan. 1; Santa Leonor, March 10–April 12.

Guiraca cærulea cærulea (*Linn.*).—2 ♀, Montelunga, Oct. 10; Rio Cruz, July 8.

Zamelodia melanocephala (*Swainson*).—1 ♀, Galindo, March 14.

Pyrrhuloxia sinuata texana *Ridgway.*—9, both sexes: Matamoros, Nov. 3, Dec. 3–Feb. 24.

Cardinalis cardinalis canicaudus *Chapman.*—38, both sexes: San Fernando, Oct. 20–23; Matamoros, Nov. 3–26; Altamira, Dec. 12–24; Rio Martinez, Feb. 25–March 5; Santa Leonor, March 7–April 15; Rio Cruz, June 23–26.

Remarks.—In 'Birds of North and Middle America' *Ridgway* gives the range of *C. cardinalis coccineus* as extending north to Altamira. Five skins, one female and four males from Altamira in the above series are, however, distinctly referable to *C. cardinalis canicaudus*, the females having the same pale, grayish capistrum, and a small bill, very different from the deep black capistrum and heavy bill of *coccineus*.

The males approach *coccineus* somewhat in the color of the back, the gray edging to the feathers being more reduced than in northern specimens, but otherwise, in their small bills and the color of the underparts, they are similar to skins from Matamoros and other northern points in Tamaulipas.

Rhodothraupis celæno (*Licht.*). 17, both sexes: Rio Santa, Sept. 8; Yerba Burna, Sept. 30; Rio Martinez, Feb. 23–26; Santa Leonor, March 7–April 15; Rio Cruz, May 1–July 10; Guiaves, May 4